

The Gulf of Mexico Program

August , 2007

Wastewater to Wetlands



Mississippi Gulf Coast Region Utility Act

- Signed by Governor April, 2006
- "Need for consolidation of water, wastewater, and storm water services"
 - Reduce costs
 - Promote resilience
 - Improve quality of natural environment
 - Improve planning and delivery of water, wastewater, and storm water services

Mississippi Gulf Coast Region Utility Act

- Gulf Coast Region includes Pearl River, Stone, George, Hancock, Harrison, and Jackson counties
- Created six county utility authorities
- George county opted not to form
- Created Gulf Region Utility Board

County Utility Authorities Role

- Planning, acquisition, construction, maintenance, operation and coordination of water, wastewater, and storm water services within their boundaries

County Utility Authorities' Powers

- Acquire, construct, improve, operate and maintain systems
- Make contracts and enter into operating agreements
- Establish and maintain rates, fees, charges for use of systems within their control
- Promulgation of rules and regulations

County Utility Authority Board of Directors

- Membership varies from county to county
 - Appointed by municipalities/board of supervisors
 - Chairmen from utility districts

Gulf Coast Region Utility Board

- Membership
 - Presidents of each of the county utility authorities
 - Three members appointed by the governor

Gulf Coast Region Utility Board

- Utility Board Role
 - “forum to collaborate and cooperate regarding water, wastewater, and storm water issues”
- Utility Board Responsibilities
 - Make recommendations to CUAs on water, wastewater, and storm water issues
 - Recommendations on uniformity and compatibility of systems
 - Help resolve cross-jurisdictional and multi-county disputes
 - Recommend priorities, emergency preparedness, training standards

Start-up Issues of County Utility Authorities

- Lack of funding, resources
- Acceptance
- Development of rules and regulations
- Providing input into development of Gulf Region Water and Wastewater Plan

Gulf Region Water and Wastewater Plan

- Draft Plan completed October, 2006
- Three public meetings on draft plan in Nov. 2006
 - Cities not receiving enough of funds
 - Hancock County not able to address complementary infrastructure needed due to severe devastation
- Draft Plan modified to add
 - \$55 million for municipal infrastructure projects
 - \$47 million for Hancock County
 - \$26 million in additional regional infrastructure
- Plan finalized January, 2007
- HUD approval April, 2007

Summary of Projects

- 62 projects recommended for funding
- Water projects - \$242.7 million
- Wastewater projects - \$332.9 million
- Storm Water projects - \$7.5 million

Initial Considerations

- Distance to Wetlands
- Type & Size of Wetland
- Landowner Issues
- Industrial Discharges
- Effectiveness

Preliminary Feasibility Analysis

- Identification of Potential Site
- Regulatory Issues (State, Federal & Local)
- Landowner Issues
- Initial Loading Rate Analysis
- Monitoring Requirements & Costs
- Engineering Costs

Monitoring Considerations

- Must Establish Ecological Baseline
 - Vegetation
 - Soil & Water Chemistry
 - Hydrology
 - Toxins
- Assess Probable Response to discharge
- Monitoring Design
 - Demo Health of Wetland System
 - Determine Removal Rates (Nutrients & Solids)
 - Effects on Downstream Surface Waters

Design & Construction Considerations

- Degree of Treatment to Assure no Harm to the Wetland
- Distribution of Wastewater into the Wetland
- Access for Monitoring

Other Issues

- Benefits to the Wetland
- Potential Wetland Mitigation
- Carbon Sequestration
- State & Federal Regulations & Policies

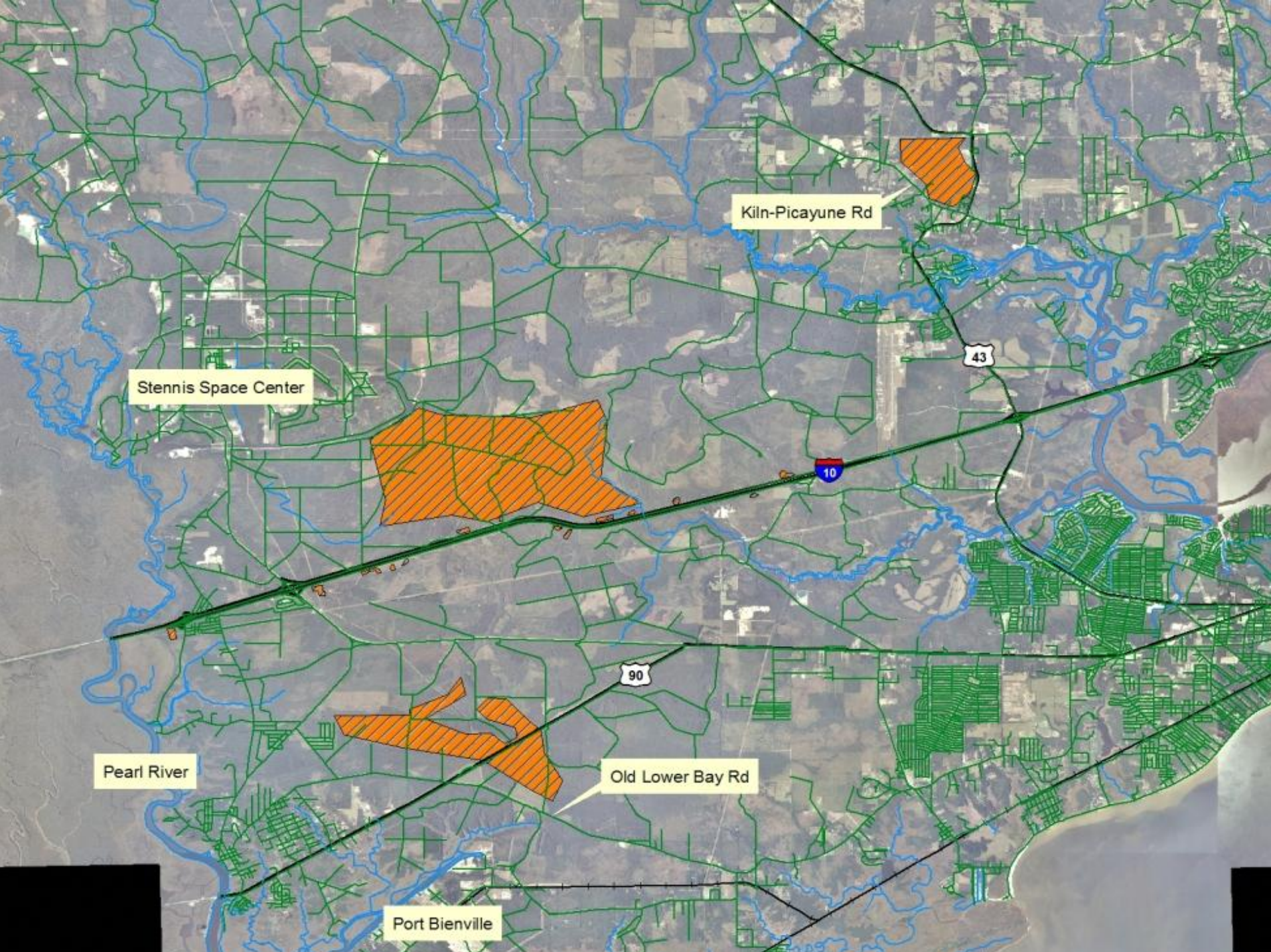


Recommended CDBG Disaster Recovery Funding



GMPO Support

- Start up Funding
- Technical Support
- Decentralized Wastewater Workshop
- Wastewater to Wetlands
 - Coordination with Region 4 & Louisiana
 - Wetlands Tour
 - Followup
- Planning A Workshop for Developers
- Pilot Projects to Demonstrate Effectiveness



Kiln-Picayune Rd

Stennis Space Center

43

10

90

Pearl River

Old Lower Bay Rd

Port Bienville



Kiln-Delisle Rd

Menge Ave

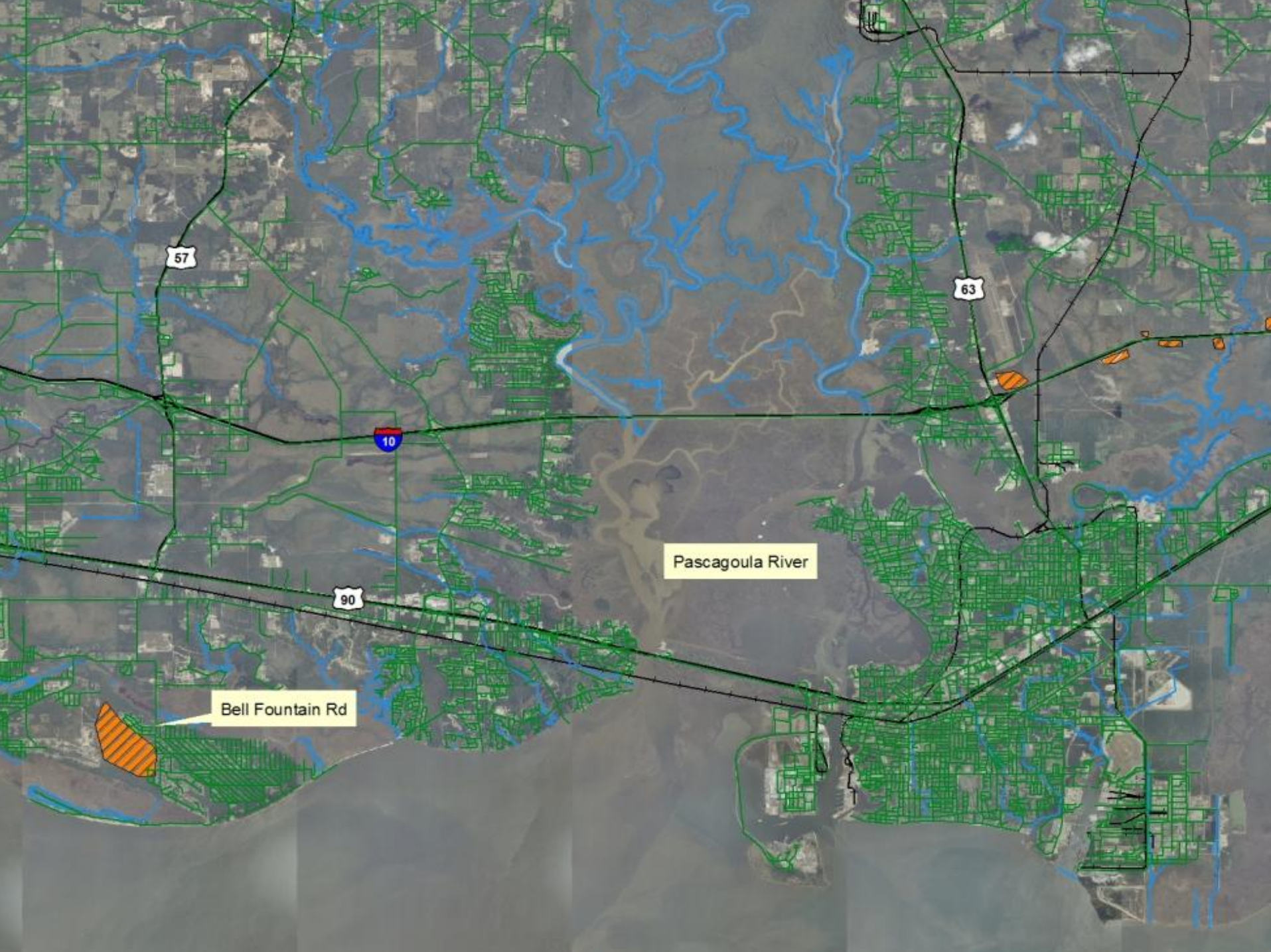
Bell's Ferry Rd

Canal Rd

Tillman Rd

10

49



Pascagoula River

Bell Fountain Rd